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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/056,489

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Jeffrey Herman

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05/25/2004

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EXAMINER

RINEHART, KENNETH

ART UNIT

PAPER NUMBER

3749

DATE MAILED: 05/25/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/056,489

Applicant(s)

HERMAN ET AL.

Examiner

Kenneth B Rinehart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 92-238 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☒ Claim(s) See Continuation Sheet is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

Continuation of Disposition of Claims: Claims rejected are 92-103,109-116,118,123-129,138,139,148,151-154,160-176,184-190,192,197-203,212,213,222,225-228 and 234-237.

Continuation of Disposition of Claims: Claims objected to are 104-108,117,130-137,140-147,149,150,155,156,177-183,191,204-211,214-221,223,224,229,230 and 238.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 163, 164 are rejected under 35 U.S.C. 102(b) as being anticipated by DE19946972. DE19946972 shows bounding a pressure space with at least four rolls (FIG. 1); pressurizing said pressure space with a compressed gas; (ABSTRACT), interposing the fiber web between a plurality of membranes (22, 10, 24); and guiding the fiber web, said plurality of membranes and an imprinting band through said pressure space at least once (FIG. 1), said plurality of membranes include an air distribution membrane and an anti rewetting membrane (22, 24, blankets, fig. 1, abstract),

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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Claim 92-103, 109, 110, 113, 114, 115, 116, 123, 124-129, 138, 139, 148, 154, 160, 161, 162, 165-176, 184, 187-190, 192, 197-203, 212-213, 222, 228, 234-236, are rejected under 35 U.S.C. 102(e) as being anticipated by Ampulski et al (6103062). Ampulski shows preimprinting the fiber web at a dry content of less than 25 % with an imprinting band under a first pressure field, (126, fig. 1, col. 10, line 20), pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three dimensional surface structure and the strength (fig. 5), said method is carried out using an imprinting screen as said imprinting band (fig. 2, fig. 3), said method is carried out using an imprinting membrane as said imprinting band (fig. 2, fig. 3), forming the fiber web on said imprinting band (col. 10, lines 25-26), said preimprinting step further includes transferring the fiber web onto said imprinting band (col. 10, lines 10-12), said method is carried out using said imprinting band for said preimprinting step (col. 10, lines 25-26), and for said fixing in said pressing step (fig. 5), at least one of said pre imprinting step and said pressing step produce at least one of said first pressure field and said second pressure field using at least one suction element, said at least one suction element located at a side of said imprinting band opposite the fiber web, said at least one suction element motivating the fiber web into an imprinting band surface structure (col. 10, lines 10-15), said method is carried out using at least one wet suction box as said at least one suction element (col. 10, line 17), said pressing step includes gently pressing the fiber web in said second pressure field (col. 11, lines 1-3), said pressing step includes gently pressing the fiber web over a length extending in a running direction (fig. 5), said pressing step further includes producing said second pressure field in a press nip (300, fig. 1), at least one of the steps of creping the fiber web and winding the fiber web following said pressing

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step (col. 17, lines 15-16), at least one of the preimprinting step and said pressing step produce said dry content less than 25 % (col. 10, line 20), said method is carried out using a suction device located in a position respective to a running direction between said suction element and said press nip, with the fiber web and the imprinting band guided together over said suction device and through said press nip (col. 10, lines 27-29), said method is carried out using said suction device with a curved surface and both the fiber web and said imprinting band are guided over said curved surface (126, fig. 1, col. 10, line 14), said method is carried out using a suction roll as said suction device (col. 10, line 14), said method is carried out using a hood providing a positive pressure and associated with a suction device to support an under pressure action of said suction device (126, fig. 1, vacuum box), said method is carried out using at least one dewatering screen with a zonally different screen permeability used in said forming region (fig. 2, fig. 3, fig. 5), said method is carried out using at least one felt with a foamed layer for dewatering the fiber web (col. 10, lines 61-67), said method is carried out using said imprinting band with at least one of a thickness between approximately 1 mm and 3 mm and an open area greater than approximately 50 %, greater than or equal to 60 %, between 70 and 75 % (fig. 2, fig. 3, col. 9, lines 22-27), an imprinting band (219, fig. 5), a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of less than 25 % (126, fig. 1, col. 10, line 20), a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and strength (fig. 5), said imprinting band is an imprinting screen (fig. 2, fig. 3), said imprinting band is an imprinting membrane (fig. 2, fig. 3), the fiber web is

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formed on said imprinting band (fig. 5), transferring the fiber web onto said imprinting band at said first pressure field (col. 10, lines 23-25), said imprinting band is used for a preimprinting and a fixing of the three dimensional surface structure (219, fig. 1, fig. 5), at least one of said first pressure field and said second pressure field is produced by an at least one suction element located at a side of said imprinting band opposite the fiber web, said at least one suction element motivating the fiber web into an imprinting band surface structure (col. 10, lines 10-27, 126, fig. 1), said at least one suction element is a wet suction box (col. 10, line 13), the fiber web is pressed gently in said second pressure field (col. 11, lines 1-3), the fiber web is pressed gently over a length extended in said running direction (fig. 5), a press nip produced said second pressure field (300, fig. 5), at least one of said first pressure field and said second pressure field produces the fiber web with a dry content less than 25 % (col. 10, line 20), a suction device located in a position respective to said running direction between said suction element and said press nip, with said fiber web and said imprinting band guided together over said suction device and through said press nip (col. 10, lines 27-29, fig. 1), said suction device has a curved surface and both the fiber web and the imprinting band are guided over said curved surface (col. 10, line 14, fig. 1), said suction device is a suction roll (col. 10, line 14), including a hood providing a positive pressure associated with said suction device to support an under pressure action of said suction device (vacuum box, 126, fig. 1), including at least one dewatering screen with a zonally different screen permeability used in said forming region (241, fig. 2, fig. 3), said imprinting band is guided through said press nip, said imprinting band having a first areal proportion of one of a plurality of raised zones and a plurality of recessed zones and a plurality of holes, said first areal proportion less than said second areal proportion resulting in a smaller areal proportion of

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the fiber web being pressed in said press nip (fig. 2, fig. 3), said imprinting band is one a imprinting screen and an imprinting membrane (figs. 2, 3, 5), said first areal proportion is less than or equal to 40 % (col. 9, lines 22-25), said first areal proportion is between approximately 20 to 30 %, approximately 25 % (col. 9, lines 22-25), said pressing step is carried out using said plurality of raised zones and said plurality of recessed zones resulting form a plurality of offsets, each said offset resulting from an intersection in a screen fabric of a pick and an end (col. 9, lines 30-32) at least one felt with a foamed layer for dewatering the fiber web (col. 10, lines 61-67), a clothing (320, fig. 5) and at least one suction roll (362, fig. 5), said clothing guided together with said imprinting band (fig. 5), with the fiber web interposed therebetween, about at least one said suction roll (fig. 5), said clothing is one of a screen, a felt with a foam layer and a spectra membrane (col. 11, lines 14-16), said clothing is one of a screen, a felt with a foamed layer and a spectra membrane (col. 10, lines 61-67), a vacuum is applied to at least one suction roll (col. 12, lines 3-5), said method is carried out using a clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one suction roll (320, 240, 362, fig. 5), said clothing is one of a screen, a felt with a foam layer and a spectra membrane (col. 10, lines 61-68), applying a vacuum to said at least one suction roll (362, fig. 5), said preimprinting step occurs subsequent in a region elative to a running direction (col. 7, lines 52-57), a plurality of membranes (62, 61, fig. 1), an imprinting band (20, fig. 1), said imprinting band and said fiber web positioned between said plurality of membranes (fig. 1); and a plurality of rolls arranged in parallel bounding a pressure space pressurized by a compressed gas for driving out water form the fiber web (85a, 85d, P, fig. 1), the fiber web said imprinting band and said plurality of membranes guided together through said pressure space at least once (fig. 1).

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Claims 92, 111, 112, 165, 184, 185, 186 are rejected under 35 U.S.C. 102(b) as being anticipated by Trokhan et al. Trokhan et al shows preimprinting the fiber web at a dry content of less than 25 % with an imprinting band under a first pressure field, (col. 6, lines 62-65, 20, fig. 1), pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three dimensional surface structure and the strength (27b, fig. 1), said dry content is less than 15 %, 10 % (col. 6, line 64), an imprinting band (20b, fig. 1), a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of less than 25 % (col. 6, lines 62-65, 20, fig. 1) a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and strength (27b, fig. 1),

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 151-153, 225-227 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ampulski et al (6103062). Ampulski et al discloses preimprinting the fiber web at a dry content of less than 25 % with an imprinting band under a first pressure field, (126, fig. 1, col. 10, line 20), pressing the fiber web onto said imprinting band using a second pressure field, said pressing step further dewatering and drying the fiber web fixing the three dimensional surface structure

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and the strength (fig. 5), said method is carried out using a clothing guided together with said imprinting band, with the fiber web interposed therebetween, about at least one suction roll (320, 240, 362, fig. 5), said method is carried out with at least one said suction roll comprising a plurality of suction rolls (fig. 5), an imprinting band (219, fig. 5), a first pressure field pressing the fiber web onto said imprinting band, said first pressure field producing the fiber web with a dry content of less than 25 % (126, fig. 1, col. 10, line 20), a second pressure field pressing the fiber web onto said imprinting band, said second pressure field subsequent to said first pressure field in a running direction, said second pressure field further dewateres and dries the fiber web fixing the three dimensional surface structure and strength (fig. 5). Ampulski et al discloses applicant's invention substantially as claimed with the exception of said method is carried out with at least one said suction roll having a diameter of between approximately 2m and 3m. At the time the invention was made it would have been an obvious matter of design choice to a person of ordinary skill in the art to have the suction roll a particular size because applicant has not disclosed that the size provides an advantage, is used for a particular purpose or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the size of Ampulski et al or the claimed size because both sizes perform the same function equally well.

Allowable Subject Matter

Claims 104-108, 117, 130-137, 140-147, 149-150, 155-156, 177-183, 191, 204-211, 214-221, 223-224, 229-230, 238 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to driers in general: Cameron (5591305), Chen et al (6197154), Pajula et al (5389205), Berry (2209761).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth B Rinehart whose telephone number is 703-308-1722. The examiner can normally be reached on 7:30 -4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703-308-1935. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KBR



Kenneth Rinehart
Patent Examiner
AU 3749